

ARDEN FORENSICS

Arden Forensics, PC
1390 Chain Bridge Road #105
McLean, VA 22101

703.749.0227 office
703.563.6059 fax
jlardenmd@ardenforensics.com
www.ardenforensics.com

Jonathan L. Arden, MD
President

Curriculum vitae of Jonathan L. Arden, MD

Employment

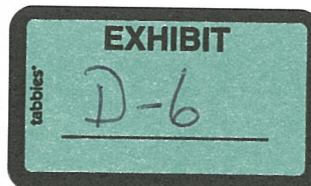
5/08–Present	Forensic Pathologist (Part-time) Office of the Chief Medical Examiner State of West Virginia
1/06–Present	President, Arden Forensics, PC
3/04–Present	Consultant in Forensic Pathology and Medicine
12/03- 7/05	Medical Examiner, Northern Virginia Region (Part-time)
4/98-10/03	Chief Medical Examiner Office of the Chief Medical Examiner Washington, DC
3/89-4/98	Office of Chief Medical Examiner, City of New York New York, NY
7/96-4/98:	First Deputy Chief Medical Examiner
7/91-7/96:	Acting First Deputy Chief Medical Examiner
8/89-6/91:	Deputy Chief Medical Examiner
3/89-7/89:	Deputy Medical Examiner
2/86-2/89	Assistant Medical Examiner Office of the Chief Medical Examiner, State of Delaware
7/84-2/86	Deputy Medical Examiner-Pathologist Office of the Medical Examiner Suffolk County, New York

Graduate Medical Training

7/83-6/84:	Resident in Forensic Pathology Office of the Chief Medical Examiner, State of Maryland
7/80-6/83:	Resident in Anatomic Pathology New York University Medical Center

Education

University of Michigan Medical School: **MD**, 1980
University of Michigan: **BS** with High Distinction, 1976
The Johns Hopkins University, 1972-1974



Curriculum vitae of Jonathan L. Arden, MD

Medical Licensure

West Virginia	2008
Maryland	2005
Virginia	2003
District of Columbia	1998-2006
Delaware	1986-2001; reinstatement 2005 (lapsed by non-renewal)
New York	1982

Board Certification

1985 Diplomat, American Board of Pathology, Anatomic and Forensic Pathology

Professional Memberships

National Association of Medical Examiners
 (Board of Directors, 2002-2008; Executive Committee, 2006-2008)
 Medical Society of Virginia
 Medical Society of the District of Columbia, 1998-2003

Academic Appointments

Clinical Assistant Professor of Pathology, George Washington University School of Medicine, 1998-2003
 Clinical Assistant Professor of Pathology, State University of New York Health Sciences Center at
 Brooklyn, 1989-1998
 Clinical Assistant Professor of Forensic Medicine, New York University School of Medicine, 1989-1998

Selected Professional Activities

Subject matter expert (representing National Association of Medical Examiners and working with RTI International) to develop web-based training program in forensic science, 2010-2011
 Identification of the Missing focus group of the National Center for Forensic Science, National Institute of Justice (representing National Association of Medical Examiners), 2006-2007
 Chair, Uniform Definitions and Standards Work Group, Center for Substance Abuse and Treatment's Project on Co-Occurring Disorders and Other Emerging Issues in Opioid Treatment, Substance Abuse and Mental Health Services Administration, US DHHS (representing National Association of Medical Examiners), 2004-2005
 Environmental Clearance Committee for the Curseen-Morris Postal Facility (co-sponsored by US Environmental Protection Agency and DC Department of Health), 2003
 Government of the District of Columbia:
 Child Fatality Review Committee, 1998-2003
 Mental Retardation and Developmental Disabilities Administration
 Fatality Review Committee, Chair, 2000-2003
 Emergency Preparedness Task Force and Emergency Preparedness Committee, 2001-2003
 Mayor's Health Policy Council, 1998-2003
 Metropolitan Washington Council of Governments, Bio-terrorism Task Force, 2001-2003
 Medical Society of the District of Columbia, Family Violence Task Force, 2000-2003
 National Association of Medical Examiners, Interim Meeting, Program Chair, February 1997
 New York State Commission on Domestic Violence Fatalities, 1996-1997
 American Board of Pathology, Forensic Pathology Test Committee, 1992-1997
 City of New York, Administration for Children's Services/Human Resources Administration, Child Fatality Review Panel, 1989-1998
 City of New York, Criminal Justice Child Abuse Task Force, 1996-1998
 New York City Multidisciplinary Child Fatality Review Team, Project Director, 1995-1998
 Physician Assistant Program, The Brooklyn Hospital-Long Island University, Pathology Course Director, 1991-1997

Curriculum vitae of Jonathan L. Arden, MD

Selected Continuing Medical and Other Education

Fourth Annual Prescriptions for Criminal Justice Forensics, Fordham University School of Law, June 7, 2013

26th Annual Forensic Anthropology Course, Maryland Office of Chief Medical Examiner, June 3-6, 2013

43rd Annual Forensic Dental Identification and Emerging Technologies Course of the Armed Forces Institute of Pathology, March 12-16, 2007

22nd Annual Washington Neuroradiology Course of the Armed Forces Institute of Pathology, February 17-18, 2007

15th Annual Anatomic Pathology Review Course of the Armed Forces Institute of Pathology, April 17-23, 2005

Selected Lectures and Presentations

"Postmortem Changes and Time of Death," "The Forensic Postmortem Exam," "Death Investigation – Standards and Best Practices," "Writing the Death Certificate," presented at the West Virginia Office of the Chief Medical Examiner 2014 Forensic Death Investigation Training Course, Sutton, WV, March 17-19, 2014

"Anatomy of a Homicide; Corpses and Causes of Death, Forensic Pathology in the Criminal Courts," guest lecturer, The George Washington University Law School, Washington, DC, February 3, 2014

"Anatomy of a Homicide; Corpses and Causes of Death, Forensic Pathology in the Criminal Courts," guest lecturer, The George Washington University Law School, Washington, DC, February 4, 2013

"Postmortem Changes and Time of Death," "Sudden Natural Deaths," "Environmental Deaths," "Drugs & Alcohol Deaths," "Immersion Deaths," "Fire/Thermal Deaths," "Sharp/Blunt Injuries," "Asphyxia," "Transportation-Related Deaths," "Early Childhood Deaths," "Completing the Death Certificate/Writing Death Investigation Reports." presented at the West Virginia Office of the Chief Medical Examiner 2012 Forensic Death Investigation Training Course, Charleston, WV, October 22-24, 2012

"The Analyst at the Morgue – Helping Families Deal with Traumatic Bereavement," presented at the American Psychoanalytic Association Community Symposium, co-presentation with Bruce Sklarew, MD, June 15, 2012

"Forensic Pathology in the Criminal Courts: Advances, New Issues, Common Mistakes and Pitfalls (and Maybe More)," presentation to the Judges of the District of Columbia Superior Court, March 28, 2012

"Anatomy of a Homicide; Corpses and Causes of Death, Forensic Pathology in the Criminal Courts," guest lecturer, The George Washington University Law School, Washington, DC, January 30, 2012

"Postmortem Changes and Time of Death," "Sudden Natural Deaths," "Forensic Pathology I and II," "Early Childhood Deaths," "Writing Death Investigation Reports." presented at the West Virginia Office of the Chief Medical Examiner 2011 Forensic Death Investigation Training Course, Sutton, WV, October 24-26, 2011

"Sudden Unexplained Infant Death," authored and presented web-based training course in conjunction with RTI International, March-April 2011

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"Postmortem Changes and Time of Death," "Sudden Natural Deaths," presented at the West Virginia Office of the Chief Medical Examiner 2010 Forensic Death Investigation Training Course, Sutton, WV, October 25, 2010

"Postmortem Changes and Time of Death," "Sudden Natural Deaths," and "Investigation of Early Childhood Deaths," presented at the West Virginia Office of the Chief Medical Examiner 2009 Forensic Death Investigation Training Course, Sutton, WV, October 5-6, 2009

"Death Investigation," presented at the South Carolina Coroner's Association 2009 Training Conference, Litchfield Beach, SC, June 10, 2009

"Forensic Pathology," presented at the Fifth National Seminar on Forensic Evidence and the Criminal Law, Philadelphia, PA, January 9, 2009

"The Role of the Forensic Pathologist in Homicide and Capital Defense," lecture given at the Yale Law School Capital Punishment Clinic, New Haven, CT, December 9, 2008

"Fatal Dissection and Rupture of a Coronary Artery Bypass Vein-Graft: Implications for ME Jurisdiction and Practice," presented at the National Association of Medical Examiners Annual Meeting, October 2008

"Recognition and Interpretation of Child Abuse Injuries," Annual Meeting, Virginia Association of Orthopaedic Technologists, McLean, VA, March 31, 2007

"Pitfalls in the Practice of Forensic Pathology," Forensic Grand Rounds, Commonwealth of Massachusetts Office of the Chief Medical Examiner and Boston University School of Medicine, November 1, 2006

"The Role of the Forensic Pathologist in Homicide Defense," Seminar, Office of the Georgia Capital Defender, July 6, 2006

"Be Careful What You Wish For..." presented at the National Association of Medical Examiners Annual Meeting, October 2005

"Sudden Natural Deaths," presented at the Armed Forces Institute of Pathology Basic Forensic Pathology Course, December 2, 1999

"Subtle Child Abuse Fatalities" presented at the National Association of Medical Examiners Interim Meeting, February 1997

Teaching and lecturing for various audiences, including: physicians, graduate medical trainees and medical students, nurses and physician assistants, law enforcement, prosecutors and defense attorneys, and interdisciplinary government panels, 1986 - Present. Topics include:

- pediatric forensic pathology (child abuse and neglect, sudden infant death syndrome)
- death investigation and certification
- deaths in custody
- sudden natural deaths
- mistakes in homicide investigations
- courtroom testimony and procedures

Curriculum vitae of Jonathan L. Arden, MD

Publications

Shuangshoti S, Hjademaal GM, Ahmad Y, Arden JL and Herman MM. Concurrence of multiple sclerosis and glioblastoma multiforme. Clin. Neuropath. 22:304-8, 2003.

Borio L, Frank D, Mani V, Chiriboga C, Pollanen M, Ripple M, Ali S, DiAngelo C, Lee J, Arden J, Titus J, Fowler D, O'Toole T, Masur H, Bartlett J, Inglesby T. Death due to bioterrorism-related inhalational anthrax: report of 2 patients. JAMA. 2001 Nov 28; 286(20):2554-9.

Flomenbaum MA, Arden JL. Final Considerations: Interacting with the Medical Examiner, Chapter 24 in *Emergency Diagnostic Testing, 2nd Ed*, Flomenbaum NE, Goldfrank L and Jacobson S, eds. Mosby-Yearbook, Philadelphia, PA 1995

Fried KS, Arden JL, Gouge TH, Balthazar EJ. Multifocal granular cell tumors of the gastrointestinal tract. Am J Gastroenterology 79(10):751-755, 1984

Smialek JE, Arden JL, Monforte JR. Changes observed in blood carbon monoxide levels due to decomposition. Abstract #c10, presented at National Association of Medical Examiners meeting, Miami, FL, 1981

Han SS, Holmstedt J, Geha-Mitzel M, Pirbazari M, Arden JL. *Biology of Aging*. Published by Program in Biology of Aging, University of Michigan Institute of Gerontology, Ann Arbor, MI, 1979

JONATHAN L. ARDEN, MD TESTIMONY LOG									
DATE	CASE NAME AND CAPTION	CASE TYPE		APPEARANCE			RETAINED BY		
		Criminal	Civil	Trial	Hearing	Deposition	Plaintiff	Defense	Prosecution
1/24/2011	Joyce Upchurch, Administratrix of the Estate of William Upchurch v. Britthaven, Inc., and Hillco, Ltd., (Superior Court Division of Johnson County, NC, 10 CVS 985)		X			X	X		
2/2/2011	Estate of McCrone v. NC Finamore & Sons, et al, (Anne Arundel County, MD, 02-C-10-151077 MT)		X			X	X		
2/16/2011	Obah Farah Walker, Administrator of the Estate of the Late Farah Saleh Farah v. Correct Care Solutions, LLC, et al, (United States District Court for the Eastern District of Virginia, Alexandria Division, Case No. 1:10cv01012-GBL-IDD)		X			X	X		
2/17/2011	Audra Byrd, Administratrix of the Estate of Malinda Adams v. SSC Eden Operating Company, et al., (General Court of Justice, Superior Court Division, Rockingham County, NC, Case No. 09 CVS 2759)		X			X	X		
2/28/2011	Carolyn Meyers, Individually as Independent Administrator of the Estate of Wilbert Meyers v. Tenet Healthsystem SL, Inc., d/b/a St. Louis University Hospital, et al., (Circuit Court of the City of St. Louis, MO, Case No. 0822-CC02101)		X			X		X	
3/1/2011	Shirley Johnson, Individually and as the Personal Representative of the Estate of Sharnell Johnson v. Rointan Farahifar, MD., et al., (Circuit Court of Prince George's County, MD, Case No. 10-08667)		X			X	X		
3/7/2011	Commonwealth of Virginia v. Tarawalie (Circuit Court of the City of Alexandria, VA)	X			X			X	
3/7/2011	State of Maryland v. Myron Antonio Gibson (Circuit Court for Charles County, MD, Case No. K09-884)	X		X				X	
5/2/2011	Audra Byrd, Administratrix of the Estate of Malinda Adams v. SSC Eden Operating Company, et al., (General Court of Justice, Superior Court Division, Rockingham County, NC, Case No. 09 CVS 2759)		X			X	X		
5/3/2011	Rita Faye Greer as Personal Representative for the Estate of Jesse Len Greer v. County of Beaufort, et al. (United States District Court, District of South Carolina, Beaufort Division, Case No. 9:09-CV-3057)		X			X	X		
5/6/2011	State of Ohio v. John Jones (Court of Common Pleas, Summit County, OH, Case No. 2010-10-2725)	X		X				X	
5/18/2011	Rhonda K. Downs, Administrator of the Estate of Anthony Gordon Downs v. Stephen H. Kaufman, MD, et al. (Circuit Court for the City of Chesapeake, VA, Case No. CL09-3449)		X			X	X		
5/20/2011	Sheri Anne Newbern and Steve Farris Individually and as Personal Representatives of Paxton Lee Farris v. Scott A. Gooden, Christopher Todd, Keith Bennett, Jeffrey McCoy, Spring Hill Police Department and City of Spring Hill (Maury County, TN Circuit Court, Case No. 11907)		X			X	X		
5/31/2011	Staci L. Steward, individually and as the Personal Representative of the Estate of Hubert Lee Steward, Jr., et al. v. Mohammad Saeed Koolae, MD (Circuit Court for Prince George's County, Maryland, Case # CAL10-29652)		X			X	X		
6/1/2011	State of Florida v. Donald Crawford (Circuit Court of the Fourth Judicial Circuit in and for Duval County, FL, Case # 09CR084502AD)	X				X		X	

JONATHAN L. ARDEN, MD TESTIMONY LOG									
DATE	CASE NAME AND CAPTION	CASE TYPE		APPEARANCE			RETAINED BY		
		Criminal	Civil	Trial	Hearing	Deposition	Plaintiff	Defense	Prosecution
6/13/2011	Commonwealth of PA v. Marcos Morales (Court of Common Pleas, Philadelphia, PA, No. MC-51-CR-4452-2009)	X		X				X	
6/14/2011	Charles L. Cadle, Individually and as Personal Representative of the Estate of Kimberly Joan Cadle, et al., v. Efigenio Bautista, MD, Arthur Marsh, MD and Warwick Manor Behavioral Health, Inc. (Circuit Court of Dorchester County, Maryland, Case #09-C-10-017922 MM)		X			X	X		
6/14/2011	Johns Williams, et al. v. FedEx Freight East, Inc, et al. (Circuit Court, Baltimore Co., MD, No. 03-C-10-009665)		X			X	X		
6/22/2011	PA v. Justine Knoll (Court of Common Pleas, Montgomery County, No. CP-46-CR-4715-2010)	X		X				X	
7/8/2011	TN v. Tiffany Sanders (Juvenile Court for Green County at Greenville, TN, Case No. J22612, File No. 12069)		X		X			X	
7/19-7/20/11	TX v. Michael Peck (District Court, 272nd Judicial District, Brazos County, TX, No. 10-01388-CRF-272)	X		X				X	
7/21/2011	Commonwealth of PA v. John James (Municipal Court of Philadelphia, No. CP-51-CR-0015337-20090)	X		X				X	
7/27/2011	ME v Garrett Cheney (Bangor, ME, Docket No. PENCD-CR-10-1369)	X		X				X	
9/1/2011	Commonwealth of Virginia v. Benjamin Russell (Circuit Court of Madison County, VA, Case No. 10005189-00)	X		X				X	
9/8/2011	Baumann Estate v. Robbins, et al (US District Court, Eastern District of Virginia, Civil No. 2:10cv00275)		X			X		X	
9/12/2011	Robinson Estate v. Mountainview Family Care, et al (District Court of the Second Judicial District in and for Davis County - Farmington Dept., State of Utah, Civil NO. 090700394)		X			X	X		
9/14/2011	State of Florida v. Donald Crawford (Circuit Court of the Fourth Judicial Circuit in and for Duval County, FL, Case # 09CR084502AD)	X		X				X	
9/15/2011	Barbara Pollard v. Michelle Pollard (General Court of Justice, Superior Court Division, Pitt County, NC, Case No. 08-CVS-52)		X			X	X		
9/16/2011	State of Tennessee v. Russell Long (Criminal Court of Washington County, TN, Case No. 35194A)	X		X				X	
9/22-9/23/11	State of Arizona v. Jeffrey Martinson (Superior Court of the State of Arizona in and for the County of Maricopa, Case No. CR2004-124662-001-SE)	X		X				X	
9/26/2011	Jason and Marybeth Nance v. Robert F. Hoofnagle, MD, et al (US District Court for the District of Maryland, Case No. 1:10-CV-03303-RDB)		X			X	X		
10/5/2011	Commonwealth of Pennsylvania v. Derek Michael Wietry (Franklin County, PA, Docket No. CR-566-09)	X		X				X	
10/7/2011	Dalton Haley v. Angela Washington, Terence Green, David Williamson, and Erika Woods (US District Court for the Northern District of Georgia, Atlanta Division, Civil Action File No.: 1:11-CV-1883-TCB)		X	X			X		
10/10/2011	Nancy Garvin as Personal Representative of the Estate of Robby Garvin v. David A. Brosman, MD., et al (Beaufort County, SC Court of Common Pleas, Civil Action #08-CP-07-2276)		X			X	X		
10/18/2011	Commonwealth of VA v. Dewitt Johnson (Norfolk Circuit Court, No. CR10002386-00)	X		X				X	
10/21/2011	Commonwealth of VA v. Eric Abshire (Circuit Court of Orange County, CR10000442-00)	X		X				X	

JONATHAN L. ARDEN, MD TESTIMONY LOG									
DATE	CASE NAME AND CAPTION	CASE TYPE		APPEARANCE			RETAINED BY		
		Criminal	Civil	Trial	Hearing	Deposition	Plaintiff	Defense	Prosecution
11/7/2011	Neal L. Perouty v. Officer David Swearn (Circuit Court of Baltimore County, MD, Case No: 03-C-11-000262)		X			X	X		
11/14/2011	VT v. Tina Cyr (Chittenden County, VT, Docket No. 1064-3-11 Cncr)	X				X		X	
11/16/2011	MD v. Joanna Findlay (St. Mary's County, MD, Case No. CCN#52806-10)	X		X				X	
12/6/2011	Bobbie McNeill v. Officer Weaver (US District Court for the District of Maryland, Case No. WDQ-10-0029)		X			X	X		
12/14/2011	People of the State of NY v. Michael Aviles and Lissette Capellan (Rockland County, NY, Docket No. 2011-32)	X		X					X
12/15/2011	Robert W. Zambreny, Sr., Individually and as Personal Representative of the Estate of Mary P. Zambreny, Deceased v. Hematology-Oncology Consultants, PA, et al (Circuit Court for Prince George's County, MD, Case No. 11-08740)		X			X	X		
12/20/2011	Julie Powers, Administratrix of the Estate of Stephen G. Powers, Deceased v. Heil Environmental Industries, Ltd. (Court of Common Pleas, Philadelphia County, PA, Civil Action No. 000517)		X	X			X		
12/23/2011	Mary A. Basham, Administrator for the Estate of Bernie Basham v. Raleigh General Hospital and Scott Matthew Kilmer, MD (Circuit of Raleigh County, WV, Case No. 09-C-967B)		X			X			
1/6/2012	MN v. Sara Marie Huey (Anoka County, MN District Court, Court File No. 02CR11-285)	X		X				X	
1/12/2012	Wesley Max Myers v. South Carolina (Charleston County Court of Common Pleas, CA# 05-CP-10-3113)		X		X			X	
1/12/2012	MD v Sims (Circuit Court for Baltimore City, MD, Case Nos. 111094010-011 and 111098018-011)	X		X				X	
1/13/2012	In the Interest of Sean Ortiz (Court of Common Pleas of Luzern County, PA, Nos. JV-325-2009 & JV-67-2010)		X		X			X	
1/17/2012	Stephen M. Brady, et al v. Christopher H. Lentz, et al (Circuit Court for Harford County, MD, Case # 12-C-11-000605 MT)		X			X	X		
1/20/2012	State of Georgia v. James Ralph Spell (Superior Court of Glynn County, Criminal Action No.: CR-1100068-063)	X		X				X	
1/23/2012	John Murray, Jr. as Administrator of the Estate of Patricia A. Holmes, deceased v. Riverside Tappahannock Hospital, Inc. (Circuit Court of the County of Essex, Virginia, Case No. CL10-163)		X			X		X	
2/1/2012	Donna Redding, Administratrix of the Estate of Robert E. Hudnell, Jr., deceased, v. Uptowner Inns, Inc. d/b/a Holiday Inn Hotel & Suites (Circuit Court of Cabell County, WV, Civil Action No: 11-C-498)		X			X			
2/8/2012	State of Delaware v. Ambrose Sykes (Superior Court of the State of Delaware in and for Kent County, ID No. 0411008300)	X		X				X	
3/9/2012	Robby D. Robinson and Lisa Robinson, individually and as Personal Representatives for the Heirs of the Estate of Bradford Robinson, v. Mountainview Family Care, et al (District Court of the Second Judicial District in and for Davis County - Farmington Dept., State of Utah, Civil No. 090700394)		X	X			X		

JONATHAN L. ARDEN, MD TESTIMONY LOG									
DATE	CASE NAME AND CAPTION	CASE TYPE		APPEARANCE			RETAINED BY		
		Criminal	Civil	Trial	Hearing	Deposition	Plaintiff	Defense	Prosecution
4/5/2012	Carla D. Henry and Carl B. Henry, Jr., Co-Administrators of the Estate of Deshery A. Bynum, deceased v. C. Dwight Groves, MD, et al (Circuit Court for the City of Norfolk, VA, Law No. CL11-6978)		X			X	X		
4/11/2012	United States v. Thomas Gioeli, et al. (United States District Court for the Eastern District of NY, No. 08 CR 240 (BMC))	X		X					X
4/12/2012	State of NJ v. Jayson Serrano (Superior Court of NJ, Camden County, Ind. No. 0631-02-10)	X		X				X	
4/24/2012	MN v. Damien Marsden (Ninth Judicial District, Marshall County, MN, No. 45-CR10-95)	X		X				X	
5/16/2012	OH v. Edward Bretzfelder (Lakewood Municipal Court, No. 11 B 1682)	X		X				X	
5/17/2012	PA v. Aaron Johnson (Philadelphia Court of Common Pleas, No. CP-51-CR-3744-2010)	X		X				X	
6/12/2012	USA v. Theodore Persico, Jr., et al., (US District Court, Eastern District NY, No. 10-147)	X		X					X
6/18/2012	Joseph Sheppard, et al., v. Adeel Afzal, MD (Circuit Court, Baltimore City, MD, No. 24-C-11-008970 OT)		X			X	X		
6/20/2012	Robert W. Zambreny, Sr., Individually and as Personal Representative of the Estate of Mary P. Zambreny, Deceased v. Hematology-Oncology Consultants, PA, et al (Circuit Court for Prince George's County, MD, Case No. 11-08740)		X	X			X		
7/27/2012	Mary A. Basham, Administrator for the Estate of Bernie Basham v. Raleigh General Hospital and Scott Matthew Kilmer, MD (Circuit of Raleigh County, WV, Case No. 09-C-967B)		X	X					
7/11/2012	Estate of Philip J. Farley v. Blaser Physical Therapy and Jane Weisenberger, Circuit Court, Prince William Co., VA, No. CL11-4874		X			X	X		
7/25/2012	Estate of James S. Edson v. Hassan A. Salih, MD, et al. (Fairfax Co. Circuit Court, No. 2011-15600)		X			X	X		
9/6/2012	Sukow v. Clark (District Court of the Virgin Islands, Division of St. Thomas and St. John, Case No. 3:10-CV-00102-CVG-RM)		X			X		X	
9/13/2012	OH v Brandon Swain (Court of Common Pleas, Summit County, OH, Case No. 2012-01-0145)	X			X			X	
9/14/2012	MD v Gary Smith (Circuit Court for Montgomery County, MD, Case No. 106589)	X		X					X
9/24/2012	OH v Denny Ross (Court of Common Pleas, Summit County, OH, No. 1999-05-1098A)	X		X				X	
10/12/2012	OH v Brandon Swain (Court of Common Pleas, Summit County, OH, Case No. 2012-01-0145)	X		X				X	
11/2/2012	Powell v Bethpage Campground (Circuit Court of Middlesex County, VA, Case No. CL11-68)		X			X		X	
11/13/2012	Bobbie McNeill v. Officer Weaver (US District Court for the District of Maryland, Case No. WDQ-10-0029)		X	X			X		
1/3/2013	Michael R. McDonald v. Howard Moses, MD, (Circuit Court for Baltimore County, MD, Civil No. 03-c-11-011674 MM)		X			X	X		
1/10/2013	Commonwealth of Pennsylvania v. Gerard Shaffer, Jr., (First Judicial District of Pennsylvania Court of Common Pleas, CP-51-CR-0006167-2010)	X		X				X	
2/22/2013	Peggy T. Allison v. Danzansky-Goldberg Memorial Chapels, (Circuit Court for Montgomery County, MD, Civil Action No.: 358481-V)		X			X	X		

JONATHAN L. ARDEN, MD TESTIMONY LOG									
DATE	CASE NAME AND CAPTION	CASE TYPE		APPEARANCE			RETAINED BY		
		Criminal	Civil	Trial	Hearing	Deposition	Plaintiff	Defense	Prosecution
1/25/2013	United States v. Tarvis Leviticus Dunham, (US District Court for the Northern District of WV, Criminal No. 1:12-CR-11)	X		X				X	
2/5/2013	Eden Davis for the Estate of Christopher Davis v. Gautham Reddy, MD, et al (District Court, Clark County, NV, Case No.: A-11-646202-C)		X			X	X		
2/18/2013	Lyndsey Van Vliet, et al., v. Mark R. Abbruzzese, et al. (Circuit Court, Montgomery Co., MD, No. 363948-V)		X			X	X		
3/5/2013	Landon Evans v. Alabama Power Co., et al. (Circuit Court, Jefferson Co., AL, No. CV-CK1-291)		X			X	X		
3/12/2013	Commonwealth of Massachusetts v. Edwin Goitia (Superior Court Dept., Springfield Division, Indictment No. 10-0642-01)	X		X				X	
3/19/2013	Wanda Frances Lawrence, et al., v. Penny Rodgers, et al (Circuit Court of Cabell County, WV, Civil Action No.11-C-757)		X			X			
3/27/2013	Lanie Workcuff C/O PIA Workcuff-Homes v. Five-Star Quality Care, Inc., C/O Legacy Heights (Charlotte, NC)		X		X			X	
4/2/2013	Estate of Simran Singh v. Roetzel & Andress, LPA (Circuit Court of Fairfax County, VA, Case No. 2012-02490)		X	X			X		
4/10/2013	Michael R. McDonald v. Howard Moses, MD, (Circuit Court for Baltimore County, MD, Civil No. 03-c-11-011674 MM)		X	X			X		
4/11/2013	State of Maryland v. Gerard J. Morgan, II (Circuit Court for Worcester County, MD, Criminal Case No. 23K12-614)	X		X				X	
4/16/2013	Commonwealth of VA v. Bradley Scott Gregory (Circuit Court for Frederick County, VA, Docket No. CR12-429 & -430)	X		X				X	
5/21/2013	Smith v. Johns Hopkins Community Physicians, Inc. (Circuit Court, Baltimore Co., MD, No. 03-C-12-8409)		X			X	X		
5/28/2013	FL v. Matthew Brooke (Ninth Judicial Circuit Court, Orange Co., FL, No. 48-2012-CF-3915-O)	X				X		X	
5/30/2013	PA v. Angel Delgado-Pabon (First Judicial District of Pennsylvania Court of Common Pleas, CP-51-CR-0011741-2011)	X		X				X	
6/19/2013	MD v. James Laboard (Circuit Court, Baltimore Co., Crim. No. 03-K-123692)	X		X				X	
7/15/2013	VT v. Norman A. Weygandt (Superior Court, Washington Unit, Criminal No. 536-5-11 Wncr)	X				X		X	
8/1/2013	HI v. Christopher Deedy (First Circuit Court, CR No. 11-1-1647)	X		X				X	
8/14/2013	OH v. Alan Aeschlimann (Court of Common Pleas, Stark Co., No. 2013CR0287)	X		X				X	
8/15/2013	PA v. Jelani Ghee (Franklin Co., No. 66-2013)	X		X				X	
8/29/2013	FL v. Micah Solomon (Fourth Judicial Circuit, No. 16-2012-4929)	X		X				X	
9/3/2013	Estate of Jimmie Sue Redden v. Bio-Medical Applications of AL, Inc. (Circuit Court of Jefferson CO., AL, No. CV 2012-901129)		X			X	X		
9/11/2013	PA v. Antonio Johnson (Court of Common Pleas, York Co., No. CR-7270-2011)	X		X				X	
9/12/2013	Piehl, et al. v. Saheta HCA (US District Court, MD, Northern Division, No. 2012-192)		X			X	X		
9/24/2013	Estate of Lisa Goodrich v. DM Rosa, MD, et.al. (Court of Common Pleas, Chester Co., PA, Civil No. 2011-06505)		X	X			X		

JONATHAN L. ARDEN, MD TESTIMONY LOG									
DATE	CASE NAME AND CAPTION	CASE TYPE		APPEARANCE			RETAINED BY		
		Criminal	Civil	Trial	Hearing	Deposition	Plaintiff	Defense	Prosecution
10/4/2013	Estate of Joseph L. Ruth, Jr., v. Estate of Ida Creque Ruth (Circuit Court, Prince George's Co., MD, No. CAL 12-40696)		X			X		X	
10/7/2013	D. Crizer (Estate of Wilma Stinefelt), et al. v. James E. Wood, Jr., MD, et al. (Circuit Court, Baltimore City, MD, No. 24-C-12-004132 OT)		X			X	X		
10/23/2013	Estate of Joseph L. Ruth, Jr., v. Estate of Ida A. Creque Ruth (Circuit Court, Prince Georges Co., MD, No. CAL 12-40696)		X	X				X	
11/5/2013	Estate of Royce Grove v. Kristian Ulloa, MD, et al. (US District Court, District of MD, No. 12-CV-02950-WDQ)		X			X	X		
11/7/2013	Estate of Pedro Gonzalez, III v. Sgt. Olson (Star No. 1145), et al. (US District Court, Northern District of IL, No. 1:11-cv-08356)		X			X	X		
11/12/2013	US v. Cacace (US District Court, Eastern District of NY, No. 08-CR-240)	X		X					X
11/25/2013	Estate of Jo Alice Price Hooper v. The Oaks at Town Center and United Health Services of North Carolina, Inc. (Arbitration, Wake County)		X			X	X		
12/16/2013	VA v. Ian Mills (Circuit Court, Virginia Beach, VA)	X		X				X	
12/17/2013	Trueblood v. Fuquay-Varina Health Holdings (Arbitration, Cabarrus County, North Carolina)		X			X	X		
1/6/2014	Shanks v. Richardson, et al. (Circuit Court for the City of Suffolk, VA, Law No.: CL12-963)		X			X	X		
1/16/2014	Estate of Jo Alice Price Hooper v. The Oaks at Town Center, LLC, et al. (Arbitration, Wake County, North Carolina)		X		X		X		
1/20/2014	Re: Praise Martin-Oguike (Temple University Administrative Hearing, Philadelphia, PA)		X		X			X	
1/23/2014	Commonwealth v. Cara L. Rintala (Trial Court of the Commonwealth of Massachusetts Superior Court Department, Hampshire Division, Indictment No. 11-128)	X		X				X	
1/30/2014	Commonwealth v. Adam Lee Hall (Superior Court of the Commonwealth of Massachusetts, Docket No. BECR2011-00139)	X		X				X	
2/5/2014	Fl. V. Robert Shane Burnette (Circuit Court, Fourth Judicial Circuit, Nassau County, FL, Docket No.: 2012-001315)	X				X		X	
2/20/2014	IA v Daniel Baldi, DO (Iowa District Court for Polk County, No. AGCR 259613)	X				X		X	
2/21/2014	Wedemeyer, et al, v. University of Maryland Medical Systems Corporation (Circuit Court for Baltimore City, Case No. 24-C-13-04605)		X			X	X		
3/13/2014	US v James White, Jr. (United States District Court, District of MN, Docket No. Criminal 13-259 JRT/LIB)	X		X				X	
3/24/2014	Estate of Eva Eleanor Beamon Goff v. Birch LTC Group, LLC, d/b/a Willow Creek Nursing Center (North Carolina Superior Court Division, Wayne County, Case #13 CVS 1762)		X			X	X		
3/26/2014	Estate of Martin Abraham Piehl, et al., v. Narayan P. Saheta, MD (US District Court for the District of Maryland, Case No.: 1:13-cv-00254-CCB)		X	X			X		
3/26/2014	Michael R. McDonald v. Howard Moses, MD, (Circuit Court for Baltimore County, MD, Civil No. 03-c-11-011674 MM)		X	X			X		

JONATHAN L. ARDEN, MD TESTIMONY LOG									
DATE	CASE NAME AND CAPTION	CASE TYPE		APPEARANCE			RETAINED BY		
		Criminal	Civil	Trial	Hearing	Deposition	Plaintiff	Defense	Prosecution
4/2/2014	Estate of Lomer Phillips v. Wal-Mart Stores East (Circuit Court for St. Claire County, AL, Pell City Division, Civil Action No.: CV-09-9000095)		X			X	X		
4/3/2014	Estate of Brian Jeffrey Lester v. Lowes Home Centers, Inc. (US District Court, Southern District of WV, Bluefield Division, Civil Action No. 1:13-23339)		X			X	-	-	-
4/28/2014	IA v. Danel Baldi, DO (Iowa District Court for Polk County, #AGCR 259613)	X		X				X	
4/30/2014	Sarah Thrift v. Stephen Andersen (Circuit Court, Westmoreland Co., VA, No. CL11-152)		X	X			X		
5/8/2014	MD v. Timothy Brumbley (Circuit Court, Wicomico Co., No. 22-K-13-000404)	X			X			X	
6/6/2014	Estate of Christopher Davis v. Gautham Reddy, MD, et al. (District Court, Clark Co., NV, No. A-11-646202-C)		X	X			X		
6/11/2014	VA v. Raymond Nelson (Circuit Court, Stafford Co., VA)	X		X				X	
6/13/2014	FL v. Prince Sanders (Circuit Court, Duval Co., FL, No. 16-2012-CF-011781-AXXX-MA)	X				X		X	
6/30/2014	People of the State of NY v. Candace Cartagena (Erie County Court, Indictment #02841-2010)	X		X				X	
7/1/2014	Commonwealth of VA v. James Christopher Thomas (Juvenile & Domestic Relations Court for the City of Alexandria, Case # JA019304-01-02)	X		X				X	
7/2/2014	HI v. Christopher Deedy (First Circuit Court, CR No. 11-1-1647)	X			X			X	
7/31/2014	HI v. Christopher Deedy (First Circuit Court, CR No. 11-1-1647)	X		X				X	
8/7/2014	Cheryl Tipton v. Whole Health Chiropractic, Inc (Circuit Court for the City of Fredericksburg, VA, Case #CL13-972)		X			X	X		
8/11/2014	WV v Timothy Miller (Circuit Court for McDowell County, Case # 12-F-119-M)	X		X					X
8/14/2014	NV v Michael Alan Lee (Justice's Court of Henderson Township, Count of Clark, Case No. 11FH1653X)	X		X				X	
8/21/2014	Estate of Margaret Marshall v. Naugatuck Housing Authority (Judicial District of Waterbury, CT, Docket No. CV 11 6011642 S)		X			X	X		
9/2/2014	Estate of Angela Holly McDaniel v. Douglas C. Powell, DO and Patient First Richmond Medical Group PLLC (Circuit Court, County of Chesterfield, VA, No. CL13-3216)		X			X	X		
9/5/2014	Cheryl Tipton v. Whole Health Chiropractic, Inc (Circuit Court for the City of Fredericksburg, VA, Case #CL13-972)		X	X			X		
10/1/2014	TN v. Sherry Dewitt (Criminal Court for Davidson County, TN, Case No. 2011-D-3631)	X		X				X	
10/3/2014	State of VT v Justin Bitar (Vermont District Court #II, Rutland Circuit, Docket #388-3-14 RDCR)	X				X		X	
10/6/2014	Funchion, et al v. Klingensmith, et al (Circuit Court for Calvert County, MD, Case No. 04-C-13-001443 MT)		X			X	X		
10/22/2014	Estate of Joseph Seth Williamson v. Abbott Laboratories and Hospira, Inc. (US District Court for the Western District of VA, Roanoke Division, Civil Action No. 7-13-CV-000551)		X			X	X		
10/29/2014	State of Maryland v. Moussa Sissoko (Circuit Court for Montgomery County, MD, Criminal No. 93709)	X			X		X		
11/2/2014	Estate of Marilyn Rossignol v. Levasseur-Farrell American Legion Post No. 49 (Caribou, ME)		X			X	X		

JONATHAN L. ARDEN, MD TESTIMONY LOG									
DATE	CASE NAME AND CAPTION	CASE TYPE		APPEARANCE			RETAINED BY		
		Criminal	Civil	Trial	Hearing	Deposition	Plaintiff	Defense	Prosecution
12/10/2014	Estate of Margaret Marshall v. Naugatuck Housing Authority (Judicial District of Waterbury, CT, Docket No. CV 11 6011642 S)		X	X			X		
12/11/2014	United States v. John General (Superior Court of the District of Columbia, Case No. 2010 CF1 009266)	X		X				X	
12/19/2014	State of VT v Justin Bitar (Vermont District Court #11, Rutland Circuit, Docket #388-3-14 RDCR)	X		X				X	
1/29/2015	South Carolina v. Michael V. Beaty (Court of General Sessions, County of Laurens, 13-GS-30-1350)	X		X				X	
2/10/2015	Commonwealth of Pennsylvania v. Margarita Garabito (First Judicial District of Pennsylvania, Case No. CP-51-CR-0000468-2010)	X		X				X	
3/9/2015	Lacey Steen, Personal Representative of the Estate of Alice Yoke, et al. v. Brightstar Healthcare-Chesapeake, et al. (Circuit Court for Anne Arundel County, MD, Case No. 02-C-14-189618)		X			X	X		
3/17/2015	New Jersey v. Dreu Ferguson, Jr. (Superior Court, Cumberland County, Case No. 11-08-00708)	X		X				X	
3/24/2015	Stacey Grove v. State of Idaho (District Court for the Second Judicial District, County of Nez Perce, Case No. CV-12-01798)		X		X		X		
4/9/2015	Kathleen Funchion, Individually and as Personal Representative of the Estate of Michael J. Funchion v. Kenneth V. Klingensmith, Jr., et al (Circuit Court for Calvert County, MD, Case No.: 04-C-13-001443 MT)		X	X			X		
4/10/2015	MA v. Hornado (Hampden County, MA Superior Court)	X		X				X	
4/15/2015	Estate of Ronald S. Tegethoff, Sr. v. Marat Goldenberg, MD, et al (Delaware County, PA Court of Common Pleas, No. 12-9444)		X	X			X		
4/23/2015	Kimziah Morfiah, as Administratrix of the Estate of Adolphus Pinkney v. City of Philadelphia, et al. (US District Court, Eastern District of PA, No. 2:13-cv-05995)		X	X				X	
5/5/2015	Kim Julie Becker Wilkinson, Executor of the Estate of Donna Joyce Cramer v. Universal Health Care/North Raleigh, Inc. and Choice Health Management Services, Inc		X			X	X		
5/22/2015	Commonwealth of Massachusetts v. April Grandinetti (Worcester Superior Court, No. 2012WOCR00347)	X		X				X	
6/1/2015	US v Arlene J. Duncan (United States District Court, District of Minnesota, Criminal No. 14-124 (JRT/LIB))	X		X				X	
6/3/2015	WV v Jessica Souther (Circuit Court of Jackson County, WV, 14-F-67)	X		X					X
6/4/2015	FL v Nicholas J. Rivet (Circuit Court, Fourth Judicial District in and for Duval County, FL, Case No. 16-2013-CF-004858 AXXX)	X		X				X	
6/22/2015	Mau v Dimensions Health Corporation (Circuit Court for Prince George's County, Maryland, Case No. CAL 14-33693)		X			X	X		
7/21/2015	Courtney Linde, et al., v. Arab Bank, PLC (US District Court, Eastern District of NY, CV-04-2799 (BMC) (VVP))		X			X	X		

ARDEN FORENSICS

Arden Forensics, PC
1390 Chain Bridge Road #105
McLean, VA 22101

703.749.0227 office
703.563.6059 fax
jlardenmd@ardenforensics.com
www.ardenforensics.com

Jonathan L. Arden, MD
President

29 April 2016

Matthew Kevin Hubbard, Esq.
City of Philadelphia Law Department
One Parkway, 1515 Arch Street
Philadelphia, PA 19102-1595

Report of Consultation

Re: Joshua Taylor, et al., v. City of Philadelphia and Police Officer Larry Shields
(US District Court, Eastern District of PA, No. 2:13-cv-02241-MSG)

Dear Mr. Hubbard:

Introduction

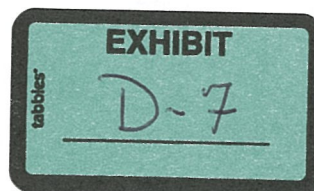
I have prepared this expert witness report in accordance with the Federal Rules of Civil Procedure, Rule 26(a)(2)(B).

You have asked me to review materials and to provide consultation in the field of forensic pathology, which I have practiced for more than thirty years. After receiving my MD degree from the University of Michigan in 1980, I completed training in anatomic pathology at the New York University Medical Center (1980-1983) and in forensic pathology at the Office of the Chief Medical Examiner for the State of Maryland (1983-1984). I have been certified in both anatomic and forensic pathology by the American Board of Pathology since 1985. I am currently licensed to practice medicine in five states. I spent most of my career as a government-employed medical examiner, including nine years with the Office of Chief Medical Examiner for the City of New York where I finished as First Deputy Chief Medical Examiner, and more than five years as the Chief Medical Examiner of Washington, DC. I am currently President of Arden Forensics, PC, a consulting practice in forensic pathology and medicine, and I hold a part-time appointment as a Forensic Pathologist in the Office of the Chief Medical Examiner for the State of West Virginia. My complete curriculum vitae, including a list of my publications, is attached.

I have testified as an expert witness in various state and federal courts, as well as in grand juries and depositions, a total of more than 800 times. A log of my testimonial appearances for the past four years is attached.

My fees are \$500.00 per hour for review of materials and consultation, and \$4,000.00 per day for court testimony. My full fee schedule is attached. My fees are not contingent upon the outcome of any case in which I consult.

One area of required and routine expertise within forensic pathology is injury interpretation, which may include determination of the type, mechanism of causation or age of injuries, as well



Re: Taylor v. Philadelphia and Shields, Report of Dr. Arden, 4/29/2016

as assessing patterns and effects of injuries. This expertise also pertains to the assessment of injuries in living people, which may be accomplished by methods including the review of medical records, photographs and radiologic imaging studies, and by examination of tissue samples. I have offered expert opinions previously at trial regarding non-fatal injuries.

Materials Reviewed

I have reviewed the following materials regarding the above-captioned case:

- Philadelphia Police Department Internal Affairs Division (IAD) Report, No. PS #11-30, including photographs;
- Notes of Testimony, Trial of PA v. Joshua Taylor, CP-51-CR-0011565-2011, Court of Common Pleas, First Judicial District, PA;
- Transcript of Deposition of PO Larry Shields, 8/19/2015;
- Medical records of Joshua Taylor from Aria Health;
- Radiological imaging studies of Joshua Taylor from Aria Health, especially CT scan of chest of 5/4/2011;
- Medical records of Joshua Taylor from:
 - Advanced Diagnostics;
 - Disston Chiropractic and Rehabilitation;
 - Frankford Medical and Pain Management;
 - Mental Health Associates;
 - Rothman Institute;
 - Northeast Philadelphia Vascular Surgeons;
 - Oana Vlad, MD;
- Plaintiffs' Complaint; and
- Defendants' Answer and Affirmative Defenses to Plaintiffs' Complaint.

I have also relied upon my education, training and experience as a physician, forensic pathologist and a medical examiner.

Brief Case Synopsis and Issue to be Addressed

On 4/25/2011, Joshua Taylor, then a 23 year old man, was shot by off-duty Philadelphia Police Officer Larry Shields. The accounts of the shooting given by Mr. Taylor and Officer Shields differ substantially. This consultation will address the forensic medical evidence as it relates to the different scenarios offered for the shooting, namely whether that evidence is consistent or inconsistent with each. Therefore, this summary of the circumstances will be limited largely to the details pertinent to that analysis. In short, Mr. Taylor was walking on the sidewalk between two houses (his and that of a neighbor) carrying a handgun. Officer Shields, who was engaged in personal activities outdoors, witnessed Mr. Taylor carrying the handgun, and attempted to intervene. Mr. Taylor ran into his own house through the front door. Officer Shields followed him to, or just through, the front door. Here, the two accounts diverge, as follows:

- Mr. Taylor said that he tripped and fell on his belly as he ran into his living room, dropping the gun and coming to rest laying on the floor. He said that he rolled over with one elbow on the floor, and then Officer Shields (who was standing in the doorway) shot him once.
- Officer Shields said that he chased Mr. Taylor, who entered his house through the front door. Officer Shields said that he entered the front door to find Mr. Taylor standing in the living room pointing the gun at him, so he shot him once from an approximate distance of 15 feet (*per* his IAD statement) or 10 – 20 feet (*per* his deposition testimony).

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Mr. Taylor was transported by private vehicle to the emergency department; after he was stabilized, he was then transferred to another hospital for a higher level of trauma care (both hospitals being part of Aria Health). Radiological imaging studies were done in both hospitals, including chest radiographs ("X-rays") in the first, and a chest CT scan in the second, which variously demonstrated aspects of the gunshot wound injuries, the location of the projectile, and effects of surgical treatment. The entrance gunshot wound was approximately at the xyphoid process, which is the small segment at the bottom of the sternum (i.e., breast bone). The bullet followed a course primarily through the liver, with the bullet coming to rest in the lower right, and slightly rear, area of the ribcage.

Analysis and Opinions

The trajectory of a gunshot wound is the directionality of the course that the wound path takes within or through the body. The trajectory of the wound permits determination of the relative positioning between the gun and the "target" when the gun was fired, because the gun must be pointed at the location of the entrance wound, and must be aimed in a direction such that the angle of the path of the bullet (which travels in a straight line) follows the trajectory of the known wound. I shall apply such analysis to the gunshot wound to Mr. Taylor by comparing the two different scenarios offered, to determine their consistency with the trajectory of his gunshot wound.

The trajectory of the gunshot wound to Mr. Taylor can be reasonably ascertained by the information contained in the medical records and by the imaging studies. (Regarding the latter source of information, I have relied upon the chest CT scan of 5/4/2011, which demonstrates the area of the entrance wound, the location of the bullet, and many of the intervening injuries. The earlier plain chest radiographs taken in the first hospital may also be valuable, but have not yet been provided for my review.) The bullet entered approximately at his xyphoid, which is the front surface of the body, and came to rest in his right-rear ribcage, at a level slightly lower (i.e., closer to the feet) than the entrance point, so the trajectory was backward, to the right, and downward, relative to his body. (For consistency of description and communication in forensic pathology, wound trajectories are described relative to the body of the injured or deceased person, who is assumed to be in "normal anatomical position," which is the person facing the observer, standing upright with the arms at his side and palms forward. In that construct, the directions of the three planes necessary to depict a trajectory in three dimensions are: right or left, front or back, and up or down. Note that in normal anatomic position, "up" is toward the head, and "down" is toward the feet.) Of greatest significance to this analysis is that one component of the gunshot trajectory in Mr. Taylor was downward. Using the CT scan, the amount of downward travel ranges from approximately 1.6 inches to approximately 2.75 inches, with most measurements centered at about 2 – 2.25 inches.

The other factors to consider in the analysis of the wound trajectory relative to the different accounts of the shooting include the distances between the gun and Mr. Taylor, the approximate height of the gun from the ground, how the gun was aimed, and especially for Mr. Taylor's account, the depth (front-to-back) of his torso, and the height above the floor and angulation relative to the floor of the front of his torso, in the position he described when he was shot. Based on my general knowledge of dimensions of human bodies derived from autopsies and examinations, and more specifically measurements of the depth of Mr. Taylor's body as shown on the CT scan, his torso was approximately 10 inches deep in the area of the gunshot wound. Making estimates by laying on the floor and raising up on one or both elbows, the front surface at the xyphoid will elevate approximately two additional inches, and the front surface of the torso will only angulate slightly from the horizontal, on the order of approximately 25°. Officer Shields offered estimates of the distance when he fired of 10 – 20 feet, or of 15 feet; this

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analysis will use both 10 and 15 feet distances. (The same analysis using 20 feet only magnifies the effects of the relative positionings, so that would also be consistent with the ultimate conclusion expressed below, and therefore is not presented separately.) I have assumed that Officer Shields had his gun in a typical shooting stance, namely close to or slightly below shoulder height, for which I have used four feet. (I performed the same analysis with the gun at three feet height, which only magnifies the effects of the angulation as presented below. Since this leads to the same ultimate conclusions, that analysis is not presented here.)

Using the parameters listed above, I constructed a scale schematic diagram of a side-view of the shooting scenario as offered by Mr. Taylor, showing the paths of the bullets if fired from four feet high at distances of 10 and 15 feet, toward a target surface which itself was 12 inches above the ground and angulated at 25° off the horizontal, simulating the front of Mr. Taylor's torso if he had propped himself up on an elbow. Under these circumstances, the bullet trajectories were angled upward relative to the body, which is directly opposite of the definitely downward vertical component of the actual gunshot wound trajectory in Mr. Taylor's body. In short, the geometry of the shooting scenario offered by Mr. Taylor is inconsistent with the objective medical evidence of his gunshot wound. In fact, an informal, common sense approach to this scenario yields the same result, namely that in the shooting scenario described by Mr. Taylor, it seems evident that the bullet trajectory would be upward in the body. Both by the common sense approach and by manipulating the factors in the scale diagram, the target surface of the front of the body would have to be sitting up at nearly a 90° angle in order to create a downward trajectory of the gunshot wound. This, too, is contrary to the descriptions of the shooting given by Mr. Taylor.

Conversely, the account given by Officer Shields is consistent with the known downward trajectory of the gunshot wound to Mr. Taylor. If Officer Shields were standing upright, approximately 15 feet away with his gun at approximately four feet above the floor, and he aimed the gun at the center of the body of Mr. Taylor, with a very slight downward angulation of the gun the resultant trajectory would be slightly downward, as was found in Mr. Taylor. In addition, if Mr. Taylor were leaning slightly forward (i.e., toward Officer Shields), then a nearly horizontal shot (i.e., parallel to the floor) would have a slight downward trajectory relative to the body. (The slight downward trajectory is also generally consistent with the gun held at a slightly lower height, especially if Mr. Taylor was leaning slightly forward.)

Conclusion

All opinions are expressed with reasonable medical certainty. I reserve the right to amend any statements or opinions if presented with additional significant information, as well as the right to rebut opinions expressed within my areas of expertise.

Yours truly,
Arden Forensics, PC



By: Jonathan L. Arden, MD
President

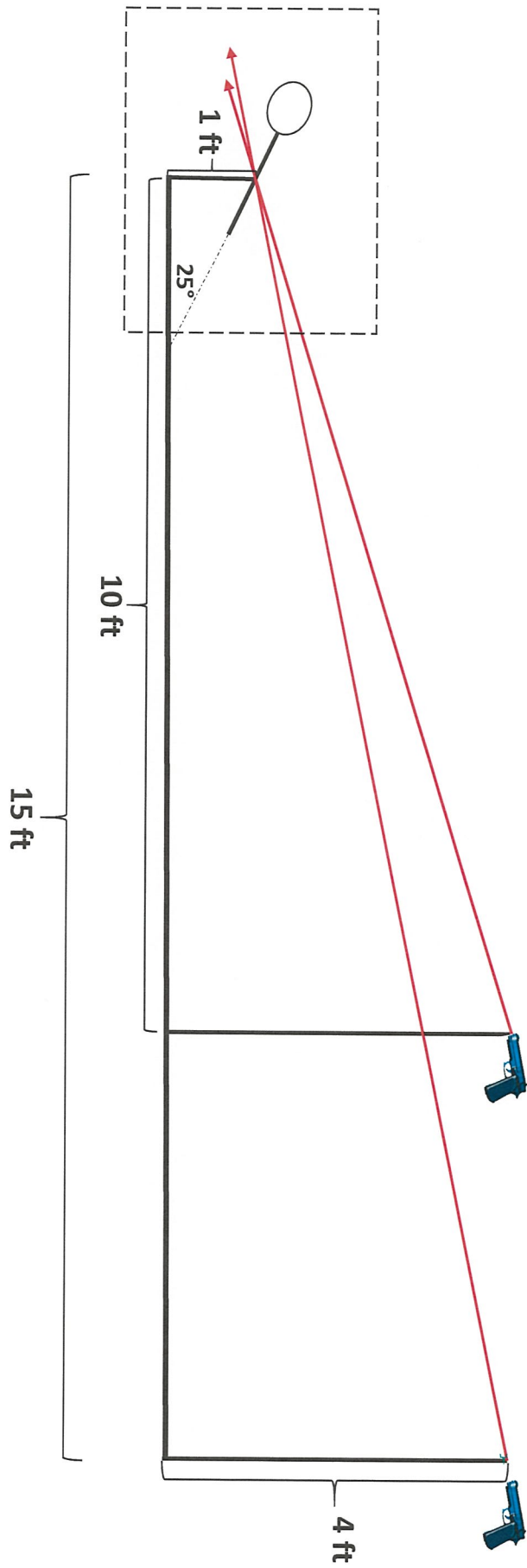
Taylor v. Philadelphia and PO Shields

Gunshot Trajectory Demonstrative

Jonathan L. Arden, MD

4/28/2016

Taylor v. Philadelphia: Mr. Taylor's Shooting Scenario
Trajectories of Gunshots from 10 & 15 feet Distances
Dr. Arden, 4/28/2016



Taylor v. Philadelphia: Mr. Taylor's Shooting Scenario
Upward Trajectories of Gunshots from 10 & 15 ft with Body in Normal Anatomical Position
Dr. Arden, 4/28/2016

